

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

The outstanding Office Action of June 13, 2006 returned to applicants a Form PTO-1449 indicating consideration of reference AO cited in the Information Disclosure Statement (IDS) filed December 15, 2003. However, applicants note that the Information Disclosure Statement also cited a reference AW in the “Other References” section of the Form PTO-1449. It appears that reference was inadvertently not acknowledged as considered. Applicants respectfully request that a new Form PTO-1449 be returned to applicants also acknowledging consideration of that reference AW.

The specification is amended by the present response to correct minor informalities, which are not believed to raise any issues of new matter.

Claims 1-20 are pending in this application. Claim 13 was rejected under 35 U.S.C. § 112, second paragraph. Claim 1 was rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 6,216,247 to Creta et al. (herein “Creta”) in view of U.S. patent 6,119,248 to Merkin. Claim 20 is allowed. Claims 2-12 and 14-19 were objected to as dependent upon a rejected base claim, but were noted as allowable if rewritten in independent form to include all of the limitations of their base claim and any intervening claims. Claims 13-19 were noted as allowable if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph, and to include all of the limitations of their base claim and any intervening claims.

Applicants gratefully acknowledge the early indication of the allowable subject matter in claims 2-20.

Addressing first the rejection of claim 13 under 35 U.S.C. § 112, second paragraph, that rejection is traversed by the present response.

Claim 13 is amended to clarify language recited therein, but applicants note no clear basis for a rejection to claim 13 was set forth in the Office Action. Applicants believe claim 13 as written is definite.

Addressing now the rejection of claim 1 under 35 U.S.C. § 103(a) as unpatentable over Creta in view of Merkin, that rejection is traversed by the present response.

Claim 1 is amended to clarify the error correction code function invalidity circuit is “connected to the error correction code control circuit and a valid bit array, initializing into an invalid state a valid bit in each of memory cells of the valid bit array after power application”. As discussed for example in the present specification at page 14, line 11 to page 15, line 1, an error correction code (ECC) function invalidity circuit, see for example element 14, has (1) a function to initialize a valid bit into an invalid bit, (2) a function to invalidate functions of a syndrome generation circuit of the ECC control circuit 13 when a memory region of the data memory 11 is accessed first after power application, and (3) a function to rewrite a valid bit corresponding to the memory region into a valid state. Thereby, the ECC function invalidity control circuit includes function to directly control an error correction function.

Applicants submit the features recited in claim 1 clearly distinguish over Creta in view of Merkin.

The outstanding rejection recognizes that Creta does not disclose the claimed error correction code function invalidity control circuit as previously claimed, and to overcome the recognized deficiencies in Creta the outstanding Office Action cited Merkin. However, applicants submit Merkin does not cure the deficiencies in Creta.

According to Merkin an error correction code function invalidity control circuit includes a reset control method 205, an enable control method 207, and a disable control method 209 in an ACPI ECC device 220 (see Figure 2 of Merkin). The ACPI ECC device

220 is connected to an ACPI driver 203 of an operating system 201 executed by a processor 103 into a register block circuit 131 (see Merkin at Figure 2 and at column 5, lines 56-57).

In Merkin the processor 103 initializes a value of bit field 161 in a register block circuit 131 to indicate non-enablement during the startup of a computer system 101 (Merkin at column 6, lines 43-45). That operation in Merkin indicates that the error correction code function invalidity control circuit, i.e. the ACPI ECC device 220, does not, however, initialize the bit field 161 directly.

Further, in Merkin the enable control method 207 sets a value indicating enablement to the bit field 161 (Merkin at column 6, lines 40-42). The disable control method 209 writes a value indicating non-enablement to the bit field 161 to disable the register block circuit 131, and may be utilized by the operating system 201 (Merkin at column 6, lines 54-62). That operation in Merkin indicates that the ACPI ECC device 220 does not, however, control an error correction function directly.

In contrast to Merkin, in claim 1 the ECC function invalidity control circuit 14 is connected to different elements in the system and has different functions as compared to those in Merkin.

With reference to Figure 1 in the present specification as a non-limiting example, the ECC function invalidity control circuit 14 is connected to an ECC control circuit 13 and a valid bit array 11a, and controls validity/invalidity of the error correction function.¹

As noted above the ECC function invalidity control circuit as claimed has a function for “initializing into an invalid state a valid bit in each of memory cells of the valid bit array after power application, and invalidating an error correction function of the error correction control circuit on pieces of data read from the memory regions of the data memory when the

¹ See also the discussion in the present specification at page 13, line 27 to page 14, line 10.

memory regions are accessed first after power application". Merkin does not disclose or suggest such features.

Thereby, Merkin cannot cure the recognized deficiencies in Creta, and amended independent claim 1 clearly distinguishes over the combination of teachings of Creta in view of Merkin.

In view of the present response, applicants respectfully submit each of the claims as written distinguishes over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

EHK:SNS\rl

Surinder Sachar

Eckhard H. Kuesters
Attorney of Record
Registration No. 28,870
Surinder Sachar
Registration No. 34,423